

INCITE Overview May 18, 2010



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What is INCITE?

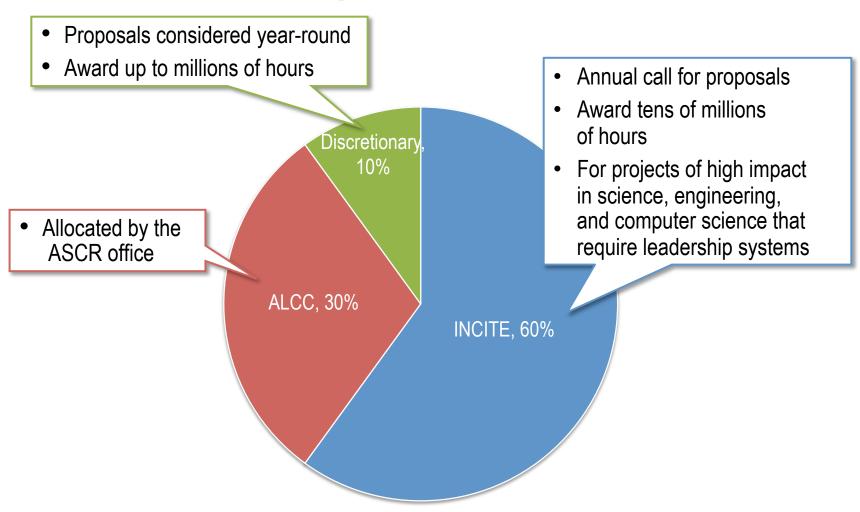
INCITE: Innovative and Novel Computational Impact on Theory and Experiment

Provides awards to academic, government, and industry organizations worldwide needing large allocations of computer time, supporting resources, and data storage to pursue transformational advances in science and industrial competitiveness.

Beginning in 2010, INCITE is jointly run by the ALCF and OLCF, managed by Julia White

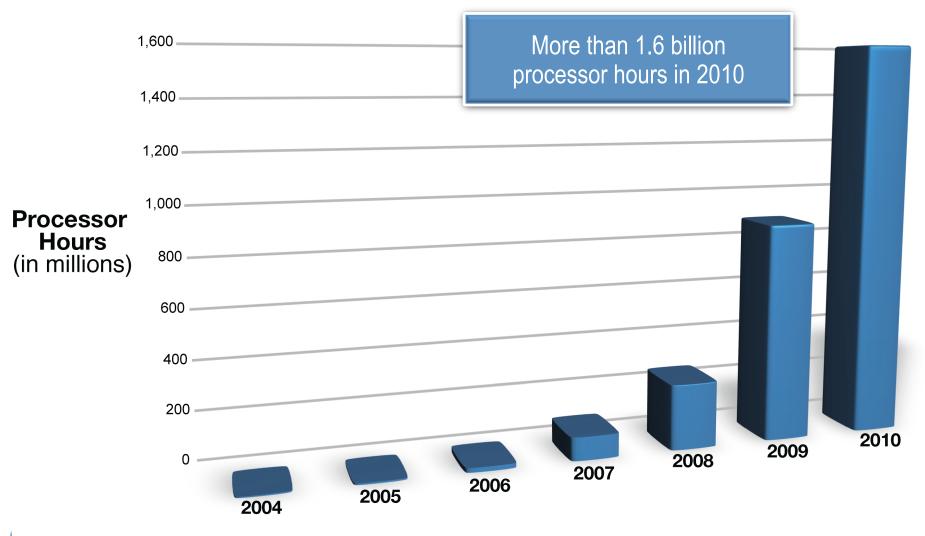


LCF allocation programs More than 2.7 billion processor hours





INCITE in its 7th year Explosive growth in program allocations





INCITE is open to researchers worldwide from academic, government, and industry organizations

Advancing the state of the art across a range of disciplines

Accelerator physics Astrophysics Bioenergy

Chemical sciences Computer Science Engineering

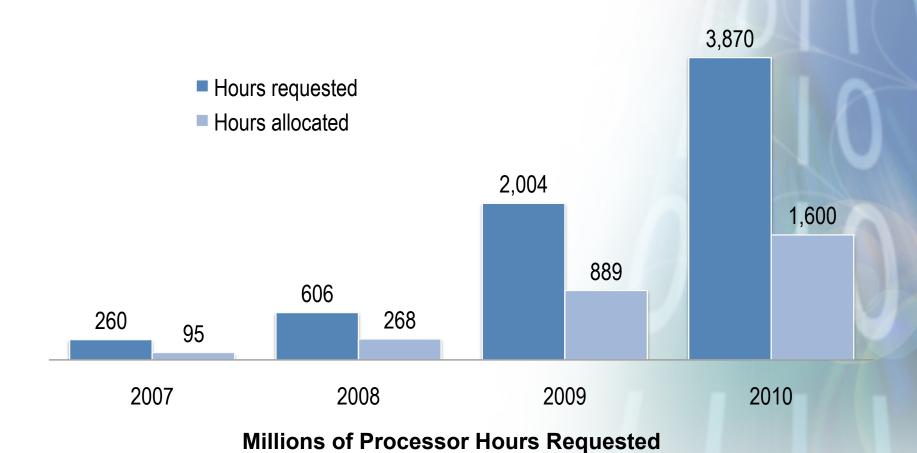
Climate research Environmental science Life sciences

Materials science Fusion energy Nuclear physics

- No designated number of hours for a particular science area
- INCITE looks at all recommendations, focusing on potential for scientific or technological impact, then readiness

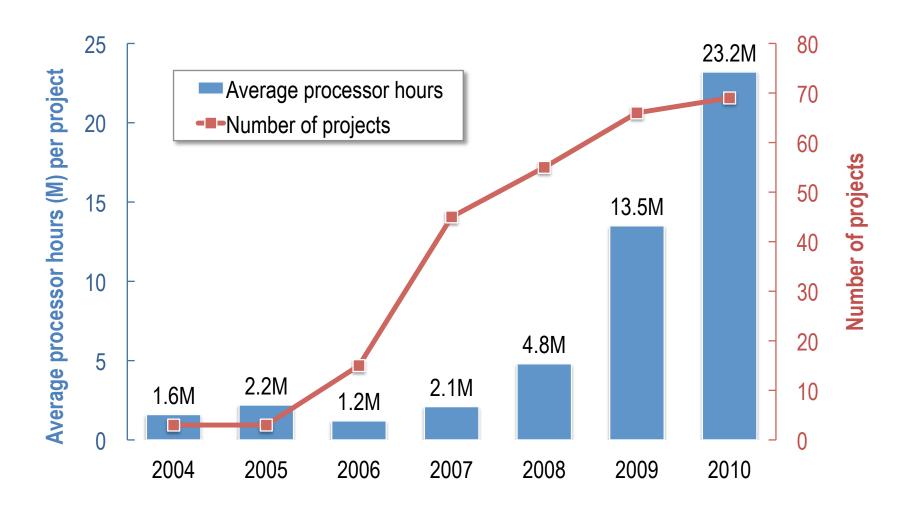


The INCITE program is typically 2.5× oversubscribed





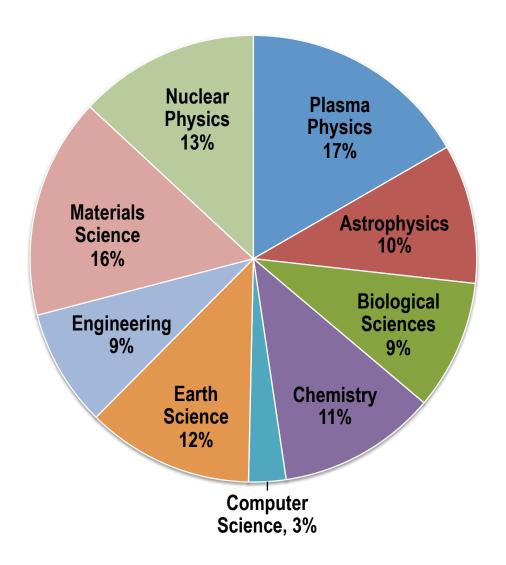
INCITE awards have grown in size and number





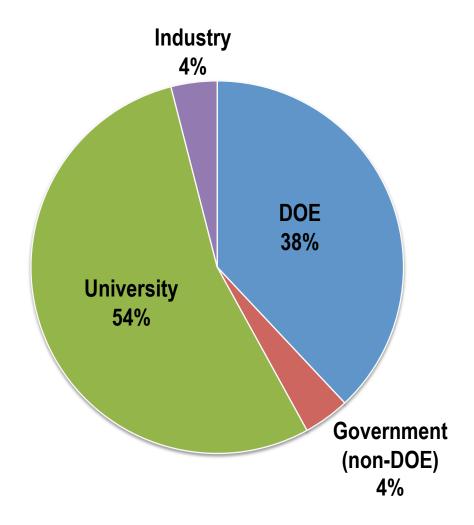
INCITE 2010 awards:

35 new projects and 34 renewal projects



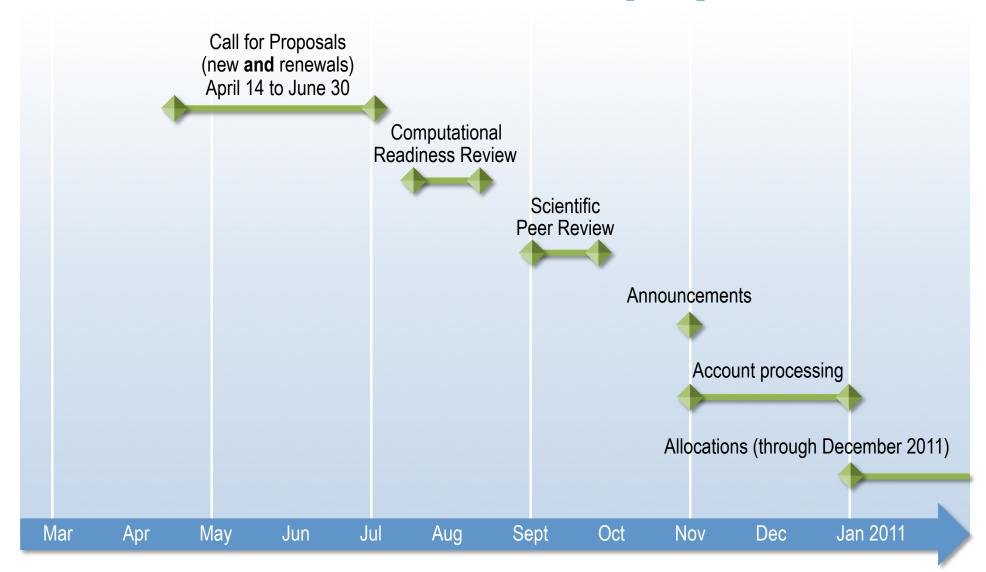


2010 project demographics by PI affiliation





INCITE 2011: Schedule for proposals





Review process: Computational readiness

- Reviewers: Center staff who are expert in these systems
- Both centers review each proposal

| Criteria for new proposals | Criteria for renewals |
|---|--|
| Appropriateness for requested resourcesAppropriateness | Met technical and computational milestones |
| of computational approach | On track to meet future milestones |
| Technical readiness | |



Review process: Panel review

Reviewers: Domain experts drawn from institutions worldwide

| Criteria for new proposals | Criteria for renewals |
|--|--|
| Scientific and/or technical merit | Change in scope |
| Appropriateness of proposal method | Met technical/scientific milestones |
| Team qualifications | On track to meet future milestones |
| Reasonableness of requested resources | Impact relative to other proposals under consideration |



2011 Call for proposals

- Opens April 14th, closes June 30th
- Awards made independently of funding source
- 1.6B processor hours to be allocated for CY 2011
- Average project award to exceed 20M processor hours
- Applicants must present evidence that their proposed production simulations can make effective use of a significant fraction, in most cases 20% or more, of the HPC systems offered for allocation



Contacts

For details about the INCITE program:

http://hpc.science.doe.gov INCITE@DOEleadershipcomputing.org



For details about the ALCC program:

http://www.er.doe.gov/ascr/Facilities/ALCC.html ALCC@Science.doe.gov



